

REMARKS

Claims 1-5, 7, and 9-13 stand rejected under 35 U.S.C. §103 as being unpatentable over previously-applied Alexander in view of newly-applied Roberts, U.S. Patent 5,949,560. This rejection is respectfully traversed.

The Examiner admits that Alexander does not specifically disclose:

a switch for transmitting the high-priority information in specific wavelength bands, or

a controller connected to the switch for selecting the wavelength bands used for transmitting of the high-priority information to give a sufficient total quality of the transmission of the high priority information

The Examiner attempts to remedy these two deficiencies by relying upon Roberts making reference to column 10, lines 40-42, and column 4, lines 23-54.

Roberts discloses an optical transmission system 1 where a transmitted signal is conveyed by a network 4 of optical fibers 5 to a receiver. The network 4 of optical fibers 5 includes optical cross-connects 6 acting as optical switching devices under the control of a control device 7. In contrast, the optical transmission system recited in claim 1 does not require a network of optical fibers. See also the non-limiting examples in Figures 5 and 6 that show one long-haul optical fiber (1 and 1'). The control device 7 in Roberts reacts to monitored data 9 so as to re-route the optical signal by actuation of the cross-connects 6. Another words, the optical signal is rerouted onto another optical fiber.

There is no teaching in Roberts' Figure 1 or in the text in Roberts' column 4 of a

wavelength division multiplex (WDM) system where high-priority transformation is "transmitted in the optical fiber link from the transmitting side to the receiving side in the plurality of wavelength bands." Nor does this text in column 4 or the system in Figure 1 disclose a switch for "transmitting the high-priority information in a number of wavelength bands which is smaller than a total number of wavelength bands." Instead, Roberts transmits all information regardless of priority (there is no distinction made between high-priority and low-priority information) over an optical path. There is no discussion in this column 4 text of using wavelength band channels. Nor does this text in column 4 disclose the recited controller for "selecting the wavelength bands used for transmitting the high-priority information to give a sufficient total quality of the transmission of the high-priority information." Instead, Roberts simply describes the cross connects 6 re-routing the optical signal to a different optical fiber/path. Independent claim 9 recites "transmitting in a plurality of wavelength bands high-priority information over an optical fiber link." This feature is lacking in Roberts as are the "transmitting" and "selecting" steps.

The Examiner also relies on column 10, lines 40-42. Here Roberts indicates generally application of his invention to WDM optical signals. Roberts explains that the "monitoring means may be arranged to derive monitored data from a selected wavelength component of the optical signal utilizing a dither technique." Column 10, lines 42-45. That is all that Roberts discloses.

Contrary to the Examiner's contention on page 3 of the Office Action, Roberts does not disclose that two WDM channels have different transmission qualities. Instead, the quoted text from column 10 suggests that the quality of a transmission that includes plural WDM channels received from the same optical route path is determined by measuring the quality of only one of those WDM channels.

There is no teaching in this text of Roberts of a "first switch for switching information between a plurality of wavelength bands" as the Examiner contends. All that Roberts discloses is that optical signals may be wavelength multiplexed onto a fiber. There is no disclosure of a switch for selectively transmitting information over specific wavelength bands, let alone selectively transmitting high-priority information over specific wavelength bands as recited in claim 1.

Nor is there a teaching of a controller in Roberts that selects for each instant "the wavelength bands used for transmitting the high-priority information to give a sufficient total quality of the transmission of the high-priority information." Roberts simply re-routes all of the wavelength division multiplexed signals from one fiber path to another fiber path using cross-connects 6. The Examiner contends that these cross connects re-route information over different wavelength bands making reference to column 4, lines 23-54. Applicants find no such teaching in this text. Instead, this text specifically states that the optical signal is re-routed "by appropriate actuation of the cross-connect 6." Column 4, lines 44-45. Figures 1 and lines 25-27 indicate that the optical cross-connects 6 switch signals over different optical fibers 5. Lines 35-36 state that the "control device

7 is operable to select the path taken by the optical signals in reaching the receiver 3."

Roberts describes switching signals between optical fibers. There is no teaching or suggestion of switching information from one wavelength band to another wavelength band.

The Federal Circuit has clearly stated the burden of proof for proving the factual basis for a prior art rejection is squarely on the Examiner. *In re Piasecki*, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner has not met that burden here with respect to the Examiner's unsupported interpretations of Roberts.

Even if Alexander and Roberts could be combined, for purposes of argument only, that combination still fails to disclose the features of claim 1. Nor does it disclose the features of claim 9 such as "selecting at each instant wavelength bands for transmitting the high-priority information, the number of the selected wavelength bands being smaller than the total number of the wavelength bands, and using only the selected wavelength bands for transmitting the high-priority information in the optical fiber link, the selecting of the wavelength bands being made to give a sufficient total quality of the transmission of the high-priority information."

Applicants also disagree with the Examiner's rationale for combining Alexander and Roberts. The Examiner states that it would have been obvious to "switch high-priority information to wavelength bands that are performing better at each instant for an overall improved quality of the transmission." Here the Examiner simply restates what he learned from Applicants' own application as the rationale for combining these two

references. There is no teaching or suggestion of this motivation in Alexander or Roberts. The Examiner further states that Roberts teaches "switching information from channel to channel as the PMD quality degrades." But the problem with this "suggestion" is that Roberts is switching between different optical fiber routes in the network 4--but not between different wavelength bands. The Examiner's approach runs afoul of the Federal Circuit's mandate that

rejection of patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an "illogical and inappropriate process by which to determine patentability."


Sensonic Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570 (Fed. Cir. 1996). This is the very process the Examiner uses to justify the Alexander-Roberts combination.

The Examiner's rejection is improper and should be withdrawn. The application is in condition for allowance.

Respectfully submitted,

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